



(19)

Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 0 853 315 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
01.12.1999 Bulletin 1999/48

(51) Int. Cl. 6: G11B 20/00, G1 1B7/00

(43) Date of publication A2:
15.07.1998 Bulletin 1998/29

(21) Application number: 98100149.8

(22) Date of filing: 07.01.1998

(84) Designated Contracting States:
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE

Designated Extension States:
AL LT LV MK RO SI

(30) Priority: 10.01.1997 JP 1475297
21.01.1997 JP 2198997
31.03.1997 JP 9660297

(71) Applicant:
VICTOR COMPANY OF JAPAN LIMITED
Yokohama-Shi Kanagawa-Ken (JP)

(72) Inventor: Mochizuki, Masaki
Yokohama-shi, Kanagawa-ken (JP)

(74) Representative:
Wagner, Karl H, Dipl.-Ing.
WAGNER & GEYER
Patentanwälte
Gewürzmühlestrasse 5
80538 München (DE)

(54) Cipher key and reproduction methods, apparatuses, systems and optical disc

(57) Plural program information and a BCA (Burst Cutting Area) number of the optical disc 100 is previously recorded in the optical disc 100. A drive ID is stored in the nonvolatile memory 104a of the reproduction apparatus 104. A user of the reproduction apparatus 104 notifies the BCA number, the drive ID, and a number of preferred program information to the software house (software supplier) 110 on the condition that the user pays for the reproduction of the preferred

program information recorded in the optical disc 100. The software house 110 notifies a cipher key to the reproduction apparatus 104 or the user. A title key is calculated in the reproduction apparatus 104 in accordance with the BCA number, the drive ID, and the cipher key. The preferred information recorded in the optical disc 100 is permitted to be reproduced by using the title key.

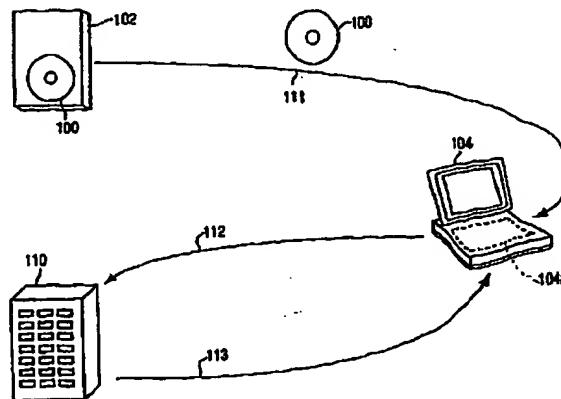


Fig. 3

EP 0 853 315 A3

Best Available Copy



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 10 0149

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP 0 561 685 A (FUJITSU LTD) 22 September 1993 (1993-09-22) * column 3, line 32 - column 6, line 8 * * column 13, line 4 - line 26 * * figures 1,2,14 *	2,14,16, 22,23, 27,28, 37,38 3,7,19, 20,32, 33,35,36	G11B20/00 G11B7/00
A	—	—	
X	EP 0 679 977 A (IBM) 2 November 1995 (1995-11-02) * column 10, line 34 - line 47 * * column 12, line 40 - line 54 * * column 14, line 27 - line 45 * * column 15, line 10 - line 23 * * column 18, line 18 - line 39 * * figures 10A,10B *	4,17,29	
A	—	1-3, 5-16, 18-24, 26-28, 30-34	
X	EP 0 191 162 A (IBM) 20 August 1986 (1986-08-20) * column 5, line 45 - line 46 * * column 6, line 7 - column 7, line 33 * * column 7, line 54 - line 55 *	1,2,22, 23,37,38	G11B G06F
A	—	3-6, 12-20, 26,27, 35,36	
X	EP 0 636 962 A (SOFTWARE SECURITY INC) 1 February 1995 (1995-02-01) * the whole document *	4,17	
A	—	7,18,42	
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	7 October 1999	Ogor, M	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document	
EPO FORM 1503 (A4) (02/92) X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

Best Available Copy



DOCUMENTS CONSIDERED TO BE RELEVANT									
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.)						
X	PATENT ABSTRACTS OF JAPAN vol. 016, no. 495 (P-1436), 14 October 1992 (1992-10-14) & JP 04 178967 A (DAINIPPON PRINTING CO LTD), 25 June 1992 (1992-06-25) * abstract *	25,39							
A	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 609, 30 September 1996 (1996-09-30) & JP 08 124305 A (SONY CORP), 17 May 1996 (1996-05-17) * abstract *	42							
A	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 609, 30 September 1996 (1996-09-30) & JP 08 124305 A (SONY CORP), 17 May 1996 (1996-05-17) * abstract *	2,3							
			TECHNICAL FIELDS SEARCHED (Int.Cl.)						
<p>The present search report has been drawn up for all claims</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 33%;">Examiner</td> </tr> <tr> <td>THE HAGUE</td> <td>7 October 1999</td> <td>Ogor, M</td> </tr> </table>				Place of search	Date of completion of the search	Examiner	THE HAGUE	7 October 1999	Ogor, M
Place of search	Date of completion of the search	Examiner							
THE HAGUE	7 October 1999	Ogor, M							
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document							
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document									

Best Available Copy

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 98 10 0149

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-10-1999

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 0561685	A	22-09-1993	JP	5257816 A	08-10-1993
			US	5392351 A	21-02-1995
			US	5555304 A	10-09-1996
			US	5796824 A	18-08-1998
EP 0679977	A	02-11-1995	US	5563946 A	08-10-1996
			JP	7295798 A	10-11-1995
EP 0191162	A	20-08-1986	CA	1238427 A	21-06-1988
			DE	3587072 A	18-03-1993
			JP	1630801 C	26-12-1991
			JP	2060007 B	14-12-1990
			JP	61145642 A	03-07-1986
			US	4757534 A	12-07-1988
EP 0636962	A	01-02-1995	US	5337357 A	09-08-1994
			CA	2120816 A	18-12-1994
JP 04178967	A	25-06-1992	NONE		
JP 08124305	A	17-05-1996	NONE		

EP FORM P0459
For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

Best Available Copy